



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D205-634-041
Job Sheet 179518



Part No: D205-634-041

Job Qty: 1 ea

Part Name: Replacement Skidtube with Standard Wearplates Fits LH or RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 6/20/18

Job Tracking No:

Due Date: 7/25/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG D2580 REV H SHEETS 1,2,3,8 IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30 KJ IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD IPP Rev. O 06.02.28 Added paperwork EC IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM IPP Rev:Q 10.12.01 as per chg003 DD ver:EC IPP REV:R 12.01.23 AS PER ECN11-684 VERF:EC IPP REV:S 17.12.08 REMOVE GASKET AS PER INTUITIVE INFO DD VERF:JFS

Ship Via:

Bill of Materials



1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S091673



Part: D205-634-041

Job No: 179518

Serial No/Batch: S091673

Revision: H

Inspector:

Exp Date:

Instructions: TC STC SH96-88 Issue 2, FAA STC SR00563NY 08/08/11, EASA S1

Job Routing									
Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	7/25/18	7/25/18	0.00	0.00	Start Up Skid tubes		m66
110	CNC Bend Skid tubes	1 pcs	7/25/18	7/25/18	0.00	0.65	CNC Bend Skid tube		m66 DO
120	Skid tubes	1 pcs	7/25/18	7/25/18	0.00	2.89	Skid tubes-2		m66
130	QC	1 pcs	7/25/18	7/25/18	0.00	0.00	QC5		PK
140	Skid tubes	1 pcs	7/25/18	7/25/18	0.00	2.89	Skid tubes-2		PK DAS 1.1
150	QC	1 pcs	7/25/18	7/25/18	0.00	0.00	QC10		38 DAS
160	QC	1 pcs	7/25/18	7/25/18	0.00	0.00	QC5		9-89 38
170	HandFinish	1 pcs	7/25/18	7/25/18	0.00	1.31	HandFinish1		SA 19-07-28
180	Powdercoat	1 pcs	7/25/18	7/25/18	0.00	0.34	Powdercoat1		BR 18-7-25
190	QC	1 pcs	7/25/18	7/25/18	0.00	0.00	QC3		18-7-26
200	HandFinish	1 pcs	7/25/18	7/25/18	0.00	1.31	HandFinish4		DAS DAS
210	QC	1 pcs	7/25/18	7/25/18	0.00	0.00	QC5		21 38
220	Packaging	1 pcs	7/25/18	7/25/18	0.00	0.00	Packaging3-1		9-89 18-7-2018
225	DC	1 pcs	7/25/18	7/25/18	0.00	0.00	DC		DAS JUL 27 2018
230	QC21-FG	1 Ea	7/25/18	7/25/18	0.00	0.00	QC21		21 JUL 27 2018

Part Op 110 - 1-Bend as per program D2580.C on CNC Bender and Folio 16 2-Cut tubes as per Dwg. D2580 3- scribe batch# in Descriptions: aft end of tube

120 - 1- Deburr ends and remove bending marks 2- Prepare tube for welding as per QSI 004

140 - 1-Weld step D2576 as per Dwg. D2580 and QSI 004 2-Grind welds on step as per Dwg D2580 3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and dwg. Hold x-bolt with DT9701 Use tube expander 1/2 x17G to start expansion and finish with 1/2 x 18G to achieve dwg dimension. 4-Drill holes for wearplates using DT 8217 & DT8937, 7.40" from most fwd saddle holes (ref only) Open holes to 19/64", adjust stopper not to hit web. Deburr 5-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr 6-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

170 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

180 - START TIME: 3.20 OVEN TEMPERATURE: 360° FINISH TIME: 9.00

200 - 1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R Sikaflex-291 143828 Sikaflex expire date: 18/11 2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580 3-Inspect for foreign object per QSI 024 4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive A/R Sikaflex-291 143828 Sikaflex expire date: 18/11

5-Wing Walk as per Dwg D2580 and QSI 005 4.4 Batch: 508099

210 - Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

220 - Identify and pack for shipping as per PPPD205-634-041 Location: PPP Rev:

225 - Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG006

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D2580-1	205 Bent Tube	1 Ea (1 ea)	90-Start up Operation	004681
D2576-3	Step (Machining Detail)	1 Ea (1 ea)	140-Skid tubes	5084330
D4202-1	Spacer	20 Ea (20 ea)	140-Skid tubes	5069014
ALS7-1032-130	Rivnut	50 Ea (50 ea)	200-HandFinish	5085516
AN3-5A	Bolt	2 Ea (2 ea)	200-HandFinish	5084123
AN3C4A	Bolt	50 Ea (50 ea)	200-HandFinish	5041106-1
D2594-1	Plug	16 Ea (16 ea)	200-HandFinish	5086186
D2594-3	O-Ring	16 Ea (16 ea)	200-HandFinish	5059021
D2855 5066018	Cap	1 Ea (1 ea)	200-HandFinish	5084102
D3564-11	Wearplate Aft	1 Ea (1 ea)	200-HandFinish	5080626
D3564-13	Wearpad Fwd	1 Ea (1 ea)	200-HandFinish	5045900
D3564-5	Wearplate Center	1 Ea (1 ea)	200-HandFinish	5073530
D3564-9	Wearplate Fwd	1 Ea (1 ea)	200-HandFinish	5054592
NAS1149C0332R	Washer	50 Ea (50 ea)	200-HandFinish	5056492
NAS1149D0332J	Washer	2 Ea (2 ea)	200-HandFinish	5020606-1

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2580-1	1	8	0
	D2576-3	1	34	0
140-Skidtubes	D4202-1	20	236	0
200-HandFinish	ALS7-1032-130	50	1,391	0
	AN3-5A	2	198	0
	AN3C4A	50	1,807	0
	D2594-1	16	337	0
	D2594-3	16	595	0
	D2855	1	83	0
	D3564-11	1	20	0
	D3564-13	1	21	0
	D3564-5	1	9	0
	D3564-9	1	22	0
	NAS1149C0332R	50	5,349	0
	NAS1149D0332J	2	1,710	0
Part Specifications				
Specifications could not be found.				

Plex 6/20/18 8:01 AM dart.lacelle.linda

WLO 179518

ITEM	QTY -041	QTY -045	QTY -047	QTY -048	PART NUMBER	DESCRIPTION
1	X				D2580-041	SKIDTUBE ASSEMBLY
2		X			D2580-045	SKIDTUBE ASSEMBLY
3			X		D2580-047	SKIDTUBE ASSEMBLY
4				X	D2580-048	SKIDTUBE ASSEMBLY
20	1	1	1	1	D2580-1-100	EXTRUSION
21			10	10	D2570	BUSHING
22	1	1	1	1	D2578-3	STEP
23		4			D2578	SPACER
24	10	10	8	8	D2594-1	PLUG
25	10	10	8	8	D2594-3	O-RING
26	1	1	1	1	D2595	205 WEB
27	1	1	1	1	D2565	AFT CAP
28	1	1			D2564-5	WEARSHOE
29	1	1			D2564-8	WEARSHOE
30	1	1			D2564-11	WEARSHOE
31	1	1			D2564-13	WEARSHOE
32	20	20	24	24	D4202-1	SPACER
33			1		D4400-041	WEARPLATE ASSEMBLY
34			1		D4400-043	WEARPLATE ASSEMBLY
35				1	D6091-1	FWD WEARPLATE
36				1	D6091-3	AFT WEARPLATE
60	60	60			AL87-1032-130 or AK87-1032-130 or AK84-1032-130 or AEL8-1032-130	INSERT
61	80	80			AN8C4A	BOLT
62	2	2	2	2	AN8-6A	BOLT
63			8	8	AN8-6A	BOLT
64	80	80			NAS1149C0352R	WASHER (AN880C16L)
65	2	2	2	2	NAS1149C0352J	WASHER (AN880JD10L)
66			8	8	MS21042-4	NUT (OR MS21042L4)

GENERAL NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2580 WEB
POWDER COAT (-041/-047/-048) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT (-045) GREEN SANDTEX (REF 4.3.5.2) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2580-041 = 33.7 lbs
D2580-045 = 33.7 lbs
D2580-047 = 43.1 lbs
D2580-048 = 32.0 lbs
- 8) WELDING PER DART QSI 004.
- 9) INSERT D2580 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL BIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 10) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 11) USE DART DRILL TEMPLATE DT8217 & DT8637 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL 60.267 HOLES FOR WEARSHOE INSERTS. INSTALL AL87-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN8C4A BOLTS AND NAS1149C0352R WASHERS WITH BIKAFLEX-241-261.
- 12) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047/-048)
- 13) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2565 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

H	SHEET: PL DELETE D3695-145-13 GASKETS, WEIGHTS UPDATED ACCORDINGLY. SHEETS 2 & 4 PICTORIAL UPDATE FOR REMOVAL OF GASKETS	SAD	17.06.09
G	ADDED -045, -047 WEIGHT UPDATED PER DSI 9898	AJS	14.04.08
F	INCORPORATE DEO D2580-E-1 PER PARTS-218	DC	13.06.20
E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B5-B) INCLUDED DEO D2580-D-1. REFORGATED DRAWING TO CURRENT STANDARDS; DT8217 & DT8637 WAS TD2577-306 (ZN C4-1)	RF	11.06.21
D	CHANGE TO 85 WEARPLATES AND GASKETS, INCLUDE DEO 9124/ 9155	PH	07.04.06
C	REDRAWN, INCLUDED DEO 9094/ 9097	CP	06.06.26
B	AS MANUFACTURED	DS	06.12.02
A	NEW ISSUE	DS	06.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	SAD		
CHECKED	DS		
MFG. APPR.	DS		
APPROVED	DS		
DE APPR.	DS		
DATE	17.06.09		

DART AEROSPACE LTD

HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D2580

REV. H

SHEET 1 OF 9

SCALE

NTS

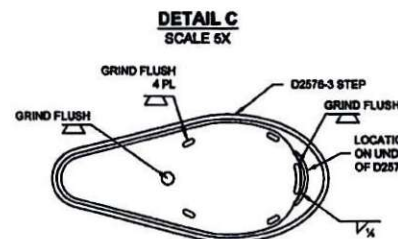
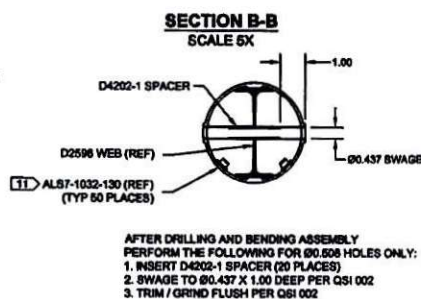
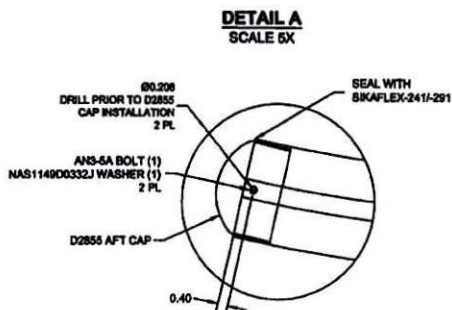
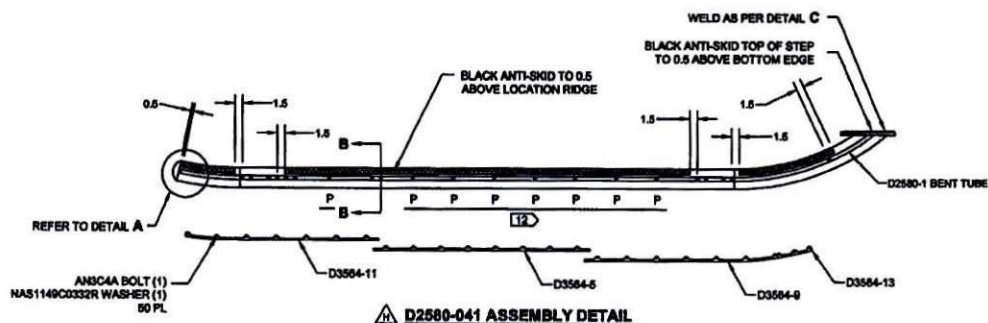
COPYRIGHT © 1995 BY DART AEROSPACE LTD

ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.

RELEASED

2017 JUL 05 4P

ENTRY-519

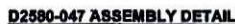


RELEASED
2017 JUL 05

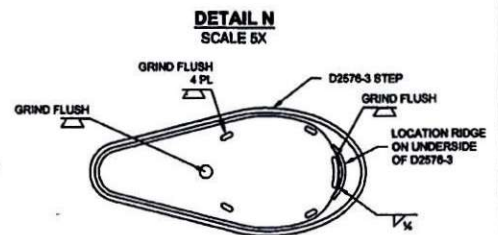
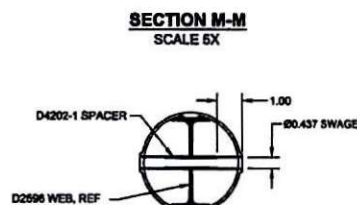
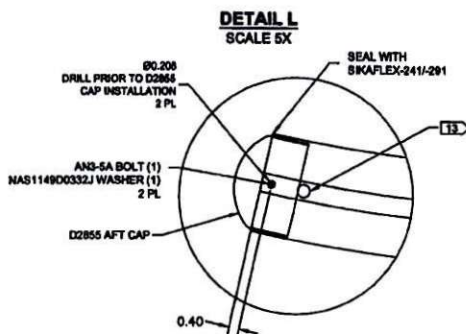
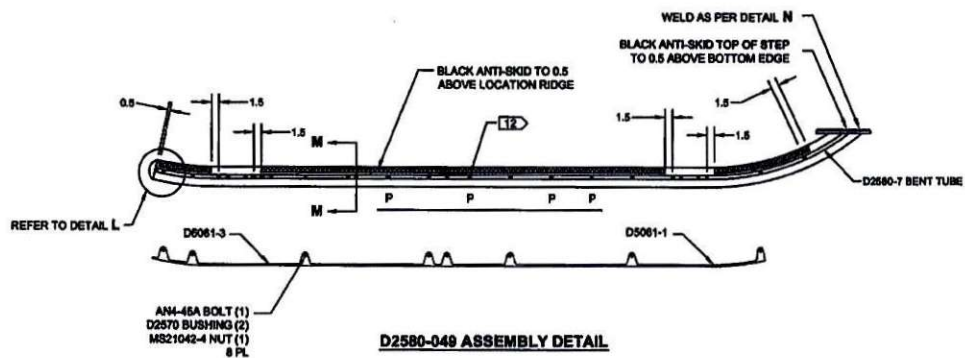
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PS	DRAWING NO.	REV. H
MFG. APPR.	PS	D2580	SHEET 2 OF 9
APPROVED	PS	TITLE	SCALE
DE APPR.	PS	205 SKIDTUBE ASSEMBLY	NTS
DATE	17.06.09	COPYRIGHT © 1995 BY DART AEROSPACE LTD	

2017 JUL 05 *ap*

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. H
MFG. APPR.		D2580	SHEET 6 OF 8
APPROVED		TITLE	SCALE
DE APPR.	<i>[Signature]</i>	205 SKIDTUBE ASSEMBLY	NTS
DATE	17.06.09	COPYRIGHT © 1986 BY DART AEROSPACE LTD THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. IT IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	



DESIGN	DS	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. H
MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 8 OF 9
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	205 SKIDTUBE ASSEMBLY	NTS
DATE	17.08.09	COPYRIGHT © 1999 BY DART AEROSPACE LTD THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED IN THE ORDER ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

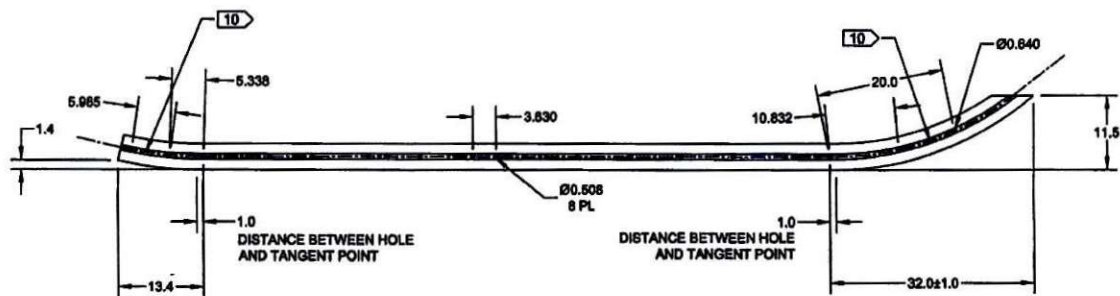


AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. INSERT D4202-1 SPACER (24 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM/GRIND FLUSH PER QSI 002

RELEASED

2017 JUL 05 4P

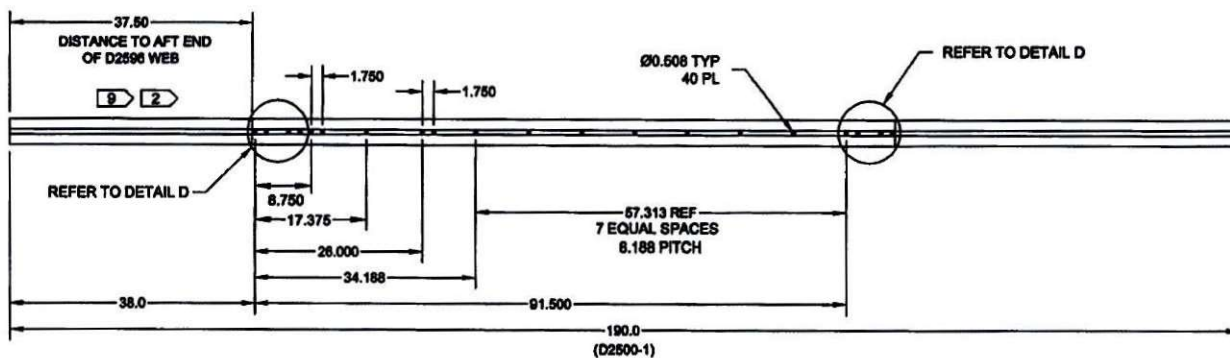
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	258	DRAWING NO.	REV. H
MFG. APPR.		D2580	SHEET 7 OF 9
APPROVED		TITLE	SCALE
DE APPR.		205 SKIDTUBE ASSEMBLY	NTB
DATE	17.06.09	COPYRIGHT © 1985 BY DART AEROSPACE LTD	



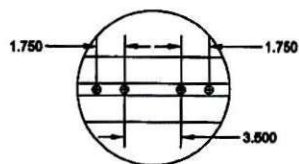
D2580-7 BENT TUBE
(MAKE FROM D2580-101 TUBE)

RELEASED
2017 JUL 05 qd

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	215	DRAWING NO.	REV. H
MFG. APPL.	215	D2580	SHEET 8 OF 9
APPROVED	215	TITLE	SCALE
DE APPL.	215	205 SKIDTUBE ASSEMBLY	NTS
DATE	17.06.09	Copyright © 1995 BY DART AEROSPACE LTD. This document is property of DART AEROSPACE LTD. It is to be used for the purpose intended and only for the specific project and only for the specific customer. It is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without prior written permission of DART AEROSPACE LTD.	



D2580-101 TUBE



DETAIL D
SCALE 5X

RELEASED
2017 JUL 05

DESIGN	06	DART AEROSPACE LTD	
DRAWN	SAD	HAMKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D2580	SHEET 9 OF 9
APPROVED		TITLE	SCALE
DE APPR.		205 SKIDTUBE ASSEMBLY	NTB
DATE	17.06.09	COPYRIGHT © 1999 BY DART AEROSPACE LTD	